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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
SULLIVAN, DEBRA M	
ART UNIT	PAPER NUMBER
3725	
MAIL DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/584,431	RACKEL, HARALD	
	Examiner	Art Unit	
	DEBRA M. SULLIVAN	3725	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *07 May 2009*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *14-26* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *14-26* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 14-21 and 25 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. With regard to claim 14 it is unclear as to what the worn-out working roll sets are being brought to or from by the transversely displaceable carriage, in addition applicant fails to claim an unblocking step therefore the limitation "after unblocking the operator's side…" it is unclear . With regard to claim 15, it is unclear where the new working roll sets are being displaced to by the transversely displaceable carriages. Claims 17-19 and 20 each recite the limitation "the step" in line 1. There is insufficient antecedent basis for this limitation in the claim. With regard to claims 18 and 25, applicant does not positively recite the closing plates.

The claims are generally narrative and indefinite, failing to conform with current U.S. practice. They appear to be a literal translation into English from a foreign document and are replete with grammatical and idiomatic errors. Some examples of errors are listed below.

1. Claim 15 line 5 recites "on one halves of the respective" it is suggested to change the phrase to "on one half of each of the respective"

2. Claim 15 line 14 recites "another halves of the respective" it is suggested to change the phrase to "another half of each of the respective"

3. Claim 15 line 16 recites "moving the new working roll sets in the respective rolling mill stands" it is suggested to change "in the respective" to "into the respective"

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

1. Claims 14-21 are rejected, as best understood, under 35 U.S.C. 103(a) as being unpatentable over Mäenpää et al (US Patent # 5,009,096) in view of Simmonds (US Patent # 3,611,779) and Wittkopf (US 2005/0000263 A1). Mäenpää et al discloses a method of exchanging roll sets (8, 9) in rolling mill stands (2) of a rolling mill train (1) having a plurality of rolling mill stands (2) each having a working roll sets (8) supported onto of each other, the method comprising the steps of on an operator's side, bring, in succession, worn-out working roll sets (8) of individual rolling mill stands (2) by separate transversely displaceable carriage (4) on a single connection track and advancing the work-out working roll sets (8) with a single locomotive (16) into a roll workshop (5), bring new working roll sets (9) from the workshop (5) [see col. 2 lines 63-64] and depositing the new working roll sets (9) at a predetermined exchange distance (onto guide 10b) onto the transversely displaceable carriage (4) between the rolling mill stand (2) and distributing the new working roll sets (9) to the respective rolling mill stand (2) [see col. 2 line 27- col. 3 line 15].

Mäenpää et al discloses the invention substantially as claimed except for wherein the installation device has a number of transversely displaceable carriages equal to the number of

rolling mill stands. However, Simmonds teaches that it is old and well known in the art to provide a displaceable carriage (14a-14c) for each rolling mill stand (A-C) in order to exchange the rolls of the rolling mill stands in a timely manner thereby reducing operation downtime. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to apply the known technique of providing multiple displaceable carriages, as taught by Simmonds, to the installation device of Mäenpää et al for the purpose of improvement to yield the predictable result of exchanging the rolls in a efficient, timely manner thereby reducing operation downtime since the single carriage of Mäenpää et al does not have to travel between rolling stands.

Mäenpää et al further discloses the transversely displaceable carriage (4) is moved to a storage space thereby unblocking the rolling mill stand (2) [see col. 3 lines 45-49]. Mäenpää et al discloses the invention substantially as claimed except for wherein the rolling stands include backup rolls and the worn-out backup rolls are withdrawn and brought with a crane in the roll workshop. However, Wittkopf teaches that it is old and well known in the art for rolling stands to have a backup roll set and a working roll set and further teaches that it is known in the roll exchanging art to remove backup rolls from the rolling mill stand and transport them to a roll workshop with the use of a crane, where they are serviced and transported back and mounted in the corresponding rolling mill stand in order to exchange the worn-out rolls efficiently and quickly [See paragraphs 0013 & 0014]. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the method of Mäenpää et al to include the method of exchanging backup rolls as taught by Wittkopf in order to quickly

and efficiently change the worn backup roll with new backup rolls prior to inserting a new pair of work rolls.

In reference to claim 15, The combination of Mäenpää et al and Simmonds further discloses the step of bringing, in succession, worn-out working roll sets (8) includes simultaneously adjusting, in a starting position in front of each of the rolling mill stands (2), the transversely displaceable carriages (4) to respective exchange distances, moving out the worn-out working roll sets (8) onto one half of each of the respective transversely displaceable carriages and subsequently moving the worn-out working roll sets (8) by the respective transversely displaceable carriages (4) via slide strips at respective chocks into the roll workshop (5) and unloading the worn-out working rolls sets (8) there [see col. 3 lines 2-15], and wherein the step of bringing new working roll sets (9) and distributing the new working roll sets (9) between respective rolling mill stands (2) includes bringing the new working roll sets (9) to the starting position [see col. 2 lines 63-64] and after the worn-out working roll sets (8) are moved out, transversely displacing the new working roll sets (9) which are located on an other half of each of the respective transversely displaceable carriages (4) and moving the new working roll sets (9) into the respective rolling mill stands (2) [see col. 3 lines 2-15].

In reference to claim 16, Mäenpää et al further discloses the moving out step includes pulling, in the start position, respective worn-out working roll sets (8) onto the respective half of each of the transversely displaceable carriages (4) [see col. 2 lines 60-62] and wherein the moving in step includes pushing the new working roll sets (9), which are brought from the roll workshop (5), on the other half of each of the respective carriages (4) at the respective exchange distances and with respective axial spacings [see col. 3 lines 11-13].

In reference to claim 17, the combination of Mäenpää et al and Simmonds further discloses a step of moving the transversely displaceable carriages (4) in a rolling direction one after another from predetermined positions thereof for mounting the new working roll sets (9) in the respective rolling mill stands (2) and for dismounting the worn-out rolling mill sets (8) [it is noted when the carriages are swiveled 180 degree they are moved in a rolling direction from a predetermined position].

In reference to claim 18, Mäenpää et al further discloses a step of establishing between the transversely displaceable carriages, precisely reproducible distances and exchange positions with respect to adjacent rolling mill stands (2) with respective intermediate plates (11a, 11b) pivotally attached to the transversely displaceable carriages (4) and pivoted in a horizontal place, and cancelling the established exchange distance by pivotal and vertical displacement of at least one of the intermediate plates (11a, 11b) [see col. 3 lines 16-22].

In reference to claim 19, the combination of Mäenpää et al, Simmonds and Wittkopf further discloses a step of forming a respective gap in front of each of the rolling mill stands (2) for exchange of the backup roll sets by displacing away the transversely displaceable carriages (4) to dismount a respective worn-out backup roll set and mount a serviced backup roll set [see Mäenpää et al col. 3 lines 45-49].

In reference to claim 20, the gap-forming step includes closing the gap in front of each of the rolling mill stands (2) by pivoting the intermediate plates (11a, 11b) and displacing the respective transversely displaceable carriages (4) to the exchange distances.

In reference to claim 21, the combination of Mäenpää et al, Simmonds and Wittkopf further discloses a step of displacing empty transversely displaceable carriages (4) with the

intermediate plates (11a, 11b) being pivoted out, in a parking position at one of the opposite ends of the rolling mill train (1) [see Mäenpää et al col. 3 lines 45-49].

2. Claims 22-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mäenpää et al in view of Simmonds. Mäenpää et al discloses an installation for exchanging roll sets (8, 9) in rolling mill stands (2) of a rolling mill train (1) with several rolling mill stands (2) having working roll sets (8, 9), comprising a drive (17) for transverse mounting and dismounting roll sets (8, 9), transversely displaceable carriage (4) connected with the drive (17), continuous rails (3) for the transversely displaceable carriage (4) and which are placed in a foundation parallel to a rolling direction at fixed distances between the rolling mill stands (2), pivotal intermediate plates (11a, 11b) for controlling the distances, a single connection track extending to a roll workshop (5) transverse to the rails for the transversely displaceable carriage (4) and a locomotive (16) displaceable along the connection track and to which the working roll sets (8, 9) are attachable and detachable [see col. 2 line 27- col. 3 line 15]. Mäenpää et al discloses the invention substantially as claimed except for wherein the rolling stands include backup rolls. However, it is old and well known in the art for rolling mill stands to have backup rolls and working rolls as evidence by Wittkopf. Mäenpää et al discloses the invention substantially as claimed except for wherein there is a plurality of transversely displaceable carriages. However, Simmonds teaches that it is old and well known in the art to provide a displaceable carriage (14a-14c) for each rolling mill stand (A-C) in order to exchange the rolls of the rolling mill stands in a timely manner thereby reducing operation downtime. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to apply the known technique of providing multiple displaceable carriages, as taught by Simmonds, to the

installation device of Mäenpää et al for the purpose of improvement to yield the predictable result of exchanging the rolls in a efficient, timely manner thereby reducing operation downtime since the single carriage of Mäenpää et al does not have to travel between rolling stands.

In reference to claim 23, Mäenpää et al further discloses the intermediate plates (11a, 11b) are pivotable upwardly and downwardly in a vertical plane [see col. 2 line 62 – col. 3 line 15].

In reference to claim 24, the combination of Mäenpää et al and Simmonds discloses the intermediate plates (11a, 11b) are respectively pivotally mounted on respective transversely displaceable carriages (4) and are pivotable by piston cylinder drives pivotally secured on the respective transversely displaceable carriages (4).

In reference to claim 25, the combination of Mäenpää et al and Simmonds discloses the transversely displaceable carriages (4), intermediate plates (11a, 11b) pivotal in a horizontal plane, and closing plates (13a, 13b) pivotally mounted in a stationary position and pivotable vertically and horizontally, form together a continuous accessible surface, as seen in figure 2.

In reference to claim 26, the combination of Mäenpää et al and Simmonds further discloses at the ends of the rails (3) that run parallel to the rolling direction, respective fixedly and pivotally supported closing plates are arranged and which provide for movement of at least half of transversely displaceable carriage (4) together with the pivotal intermediate plates (11a, 11b).

Response to Arguments

Applicant's arguments filed May 7, 2009 have been fully considered but they are not persuasive. Applicant argues that Mäenpää et al does not disclose or even remotely suggests

bringing, in succession, worn-out working roll sets of individual rolling mill stands by separate transversely displaceable carriages a number of which corresponds to a number of rolling mill stands, on a single connection track and advancing the worn-out working roll set with a single locomotive into a roll workshop, nor does Mäenpää et al disclose bring new working roll sets from the workshop and depositing the new working roll sets at predetermined exchange distances on respective transversely displaceable carriages and distributing the new working roll sets.

The examiner respectfully disagrees with Applicant. Applicant appears to be arguing that the withdraw of the worn-out working roll sets and withdraw of the new working roll set from a roll workshop are done in succession and not simultaneously as disclosed in Mäenpää et al. However, this argument conflicts with the claims since claim 14 recites that the worn-out working roll sets of individual rolling mill stands are brought out in succession by separately transversely carriages and does not claim bring the worn-out working roll sets to a roll workshop and bring new working roll sets from the roll workshop in succession. Mäenpää et al discloses bringing worn-out working roll sets from each rolling stand and advancing them into a roll workshop in succession [see col. 3 lines 23-45] and bringing new working roll sets from the workshop and depositing the new working roll set at predetermined exchange distances onto the transversely displaceable carriage [see col. 2 lines 61-62, figure 3] therefore Mäenpää et al meets the claimed limitations. It is further noted that Simmonds and Wittkopf are combined Mäenpää et al solely for teaching of using a plurality of transversely displaceable carriages (Simmonds) and removing backup rolls for servicing via a crane (Wittkopf).

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Debra Sullivan whose telephone number is (571) 272-1904. The examiner can normally be reached Monday - Thursday 10am - 8pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dana Ross can be reached at (571) 272-4480. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Debra M Sullivan/
Examiner, Art Unit 3725

/Dana Ross/
Supervisory Patent Examiner, Art Unit 3725